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What is claimed is:

1. A mixture free of isocyanate-reactive functional groups, containing

5 - isocyanate groups and no groups activable with actinic radiation or

- isocyanate groups and groups activable with actinic radiation

10 as the sole or predominant reactive functional groups and also at least one initiator activable by actinic radiation.

2. A mixture as claimed in claim 1, wherein the actinic radiation is UV radiation or electron beams.

15 3. A mixture as claimed in claim 1 or 2, wherein the initiator activable with actinic radiation is a photoinitiator.

4. A mixture as claimed in claim 3, wherein the photoinitiator is selected from the group consisting of unimolecular (type I) and bimolecular (type II) photoinitiators.

20 5. A mixture as claimed in claim 4, wherein the photoinitiator of type I is selected from the group consisting of benzophenones in combination with tertiary amines, alkylbenzophenones, 4,4'-bis(dimethylamino)benzophenone (Michler's ketone), anthrone, and halogenated benzophenones, and the photoinitiator of type II is selected from the group consisting of benzoins, benzoin derivatives, especially benzoin ethers, benzil ketals, acylphosphine oxides, especially 2,4,6-trimethylbenzoyldiphenylphosphine oxide, bisacylphosphine oxides, phenylglyoxylic esters, camphorquinone, alpha-aminoalkylphenones, alpha,alpha-dialkoxyacetophenones, and alpha-hydroxyalkylphenones.

6. A mixture as claimed in any of claims 1 to 5, wherein the groups activable with actinic radiation contain at least one bond which can be activated with actinic radiation.
- 5 7. A mixture as claimed in claim 6, wherein the bond which can be activated with actinic radiation is selected from the group consisting of carbon-hydrogen and carbon-halogen single bonds, carbon-carbon, carbon-oxygen, carbon-nitrogen, carbon-phosphorus, and carbon-silicon single bonds and double bonds, and carbon-carbon triple bonds.
- 10 8. A mixture as claimed in claim 7, wherein the bond which can be activated with actinic radiation is a carbon-carbon double bond ("double bond").
9. A mixture as claimed in claim 8, wherein the bond which can be activated with actinic radiation is present in a group activable with actinic radiation, selected from the group consisting of (meth)acrylate, ethacrylate, crotonate, cinnamate, vinyl ether, vinyl ester, dicyclopentadienyl, norbornenyl, isoprenyl, isopropenyl, allyl, and butenyl groups; dicyclopentadienyl ether, norbornenyl ether, isoprenyl ether, isopropenyl ether, allyl ether, and butenyl ether groups; and dicyclopentadienyl ester, norbornenyl ester, isoprenyl ester, isopropenyl ester, allyl ester, and butenyl ester groups.
- 15 10. A mixture as claimed in claim 9, wherein the group which can be activated with actinic radiation is an acrylate group.
- 20 11. A mixture as claimed in any of claims 1 to 10, wherein the isocyanate-reactive functional groups are hydroxyl groups, thiol groups, primary and secondary amino groups, and imino groups.
- 25 12. A mixture as claimed in any of claims 1 to 11, wherein the isocyanate groups or the isocyanate groups and the groups which can be activated with actinic radiation are the sole reactive functional groups present in the mixture.

13. The use of a mixture as claimed in any of claims 1 to 12 as a crosslinking component (component II) of a two-component or multicomponent system comprising at least one initiator activable by actinic radiation.
- 5 14. A two-component or multi-component system comprising at least one initiator activable by actinic radiation and composed of
 - (I) at least one component free of isocyanate groups, containing groups activable with actinic radiation and isocyanate-reactive functional groups as the sole or predominant reactive functional groups and
 - 10 (II) at least one component free of isocyanate-reactive functional groups and containing
- 15 - isocyanate groups and no groups activable with actinic radiation or
- isocyanate groups and groups activable with actinic radiation,
- 20 as the sole or predominant functional groups,
- in which all or most of the initiator activable with actinic radiation is present in component(s) (II).
- 25 15. A system as claimed in claim 14, wherein all of the initiator activable by actinic radiation is present in component(s) (II).
16. A system as claimed in claim 14 or 15, wherein the groups which can be activated with actinic radiation and the isocyanate-reactive functional groups are the sole reactive functional groups present in component(s) (I).
- 30 17. A system as claimed in any of claims 14 to 16, wherein the isocyanate groups or the isocyanate groups and the groups which can be activated with

actinic radiation are the sole reactive functional groups present in component(s) (II).

18. The system as claimed in any of claims 14 to 17, wherein the equivalents 5 ratio of isocyanate-reactive functional groups in component(s) (I) to the isocyanate groups in component(s) (II) is from 0.5:1 to 1:0.5.
19. A process for preparing a two-component or multicomponent system comprising at least one initiator activable by actinic radiation and composed of 10
 - (I) at least one component free of isocyanate groups, containing groups activable with actinic radiation and isocyanate-reactive functional groups as the sole or predominant reactive functional groups and 15
 - (II) at least one component free of isocyanate-reactive functional groups and containing
 - isocyanate groups and no groups activable with actinic radiation or 20
 - isocyanate groups and groups activable with actinic radiation
- 25 as the sole or predominant reactive functional groups by separately preparing components (I) and (II), which comprises adding all or most of the initiator activable by actinic radiation to component(s) (II). 30
20. A process as claimed in claim 19, wherein at least one mixture as claimed in any of claims 1 to 12 is used as component(s) (II).

21. The use of a system as claimed in any of claims 14 to 18 or of a system prepared by a process as claimed in claim 19 or 20 for preparing compositions curable thermally and with actinic radiation (dual cure compositons).

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22. The use as claimed in claim 21, wherein the dual cure compositions serve as coating materials, adhesives, sealants, or precursors of films and moldings.

10 23. The use as claimed in claim 22, wherein the dual cure coating materials serve to produce clearcoats.

24. The use as claimed in claim 23, wherein the clearcoats are part of multicoat color and/or effect paint systems.